ULTRASONIC PROBE

Patent number:	JP6209937
Publication date:	1994-08-02
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Classification:	
- international:	A61B8/12; G01N29/28
- european:	
Application number:	JP19930008443 19930121
Priority number(s):	

Abstract of **JP6209937**

PURPOSE:To provide an ultrasonic image having the excellent image quality in a stable manner by preventing bubbles from passing through the central part of a sound radiation surface by setting the gap between a sound window and the sound lens central part of an ultrsonic vibrator element narrower than the gap between the lens peripheral part and the sound window.

CONSTITUTION:An ultrasonic vibrator element 2 is formed from a piezoelectric element 11, back surface brake layer 12 nipping the piezoelectric element 11, and spherical surface sound lenses 13 a and 13b, and the ultrasonic vibrator element 2 is supported on a housing 14. A sound window 17 is formed at the top edge hardened part of an ultrasonic probe, and the inside of a sheath is filled with the sound medium. At this time, the vicinity of the central part of the sound lens 13b and the sound window 17 are brought into inscribed contact, and since a gap is formed between the sound window 17 on the peripheral part of the sound lens 13b and the lens, bubbles do not pass through the vicinity of the central part of the sound lens, and pass through the peripheral part of the lens.